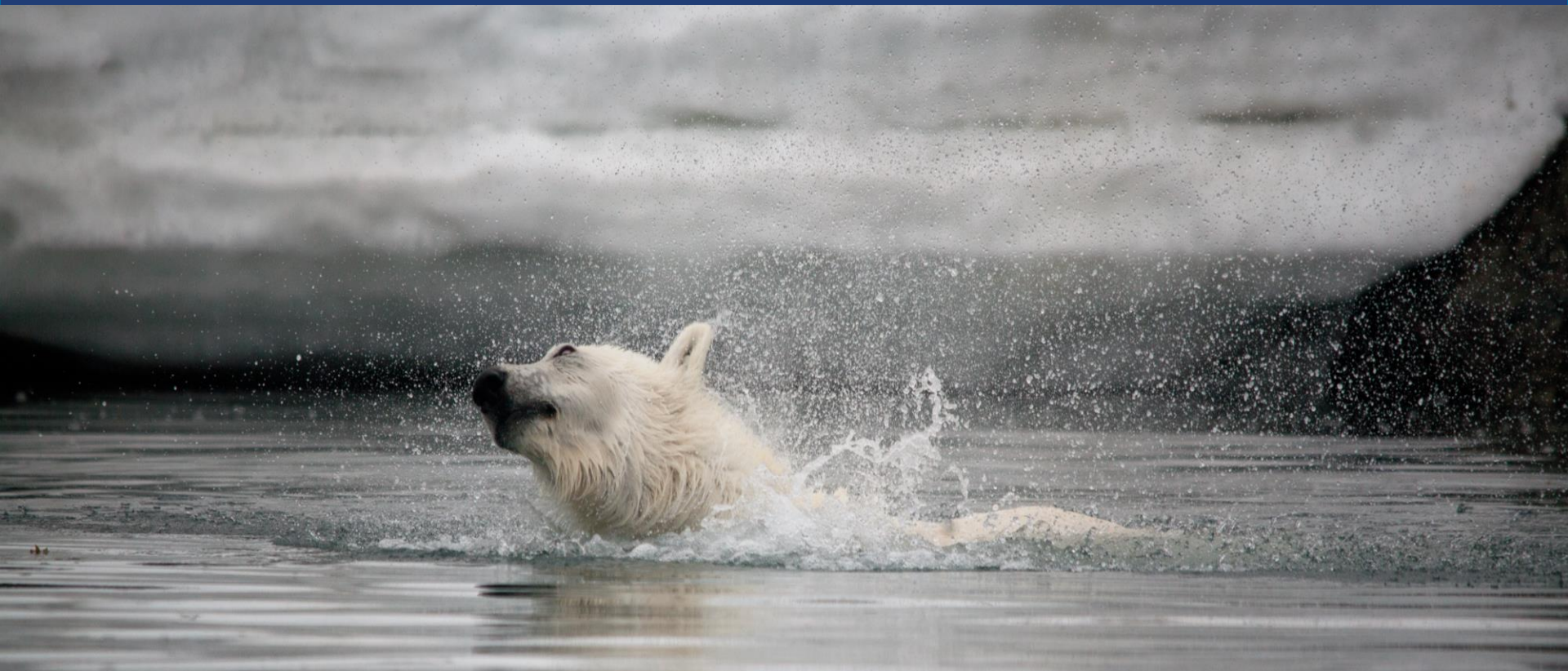


## Evaluating the impact of a youth polar expedition on participants proenvironmental behaviour: A case study of *Students on Ice* Alumni Programme

In collaboration with Emma J. Stewart , Patrick T. Maher & Manuel Alector Ribeiro & Students on Ice

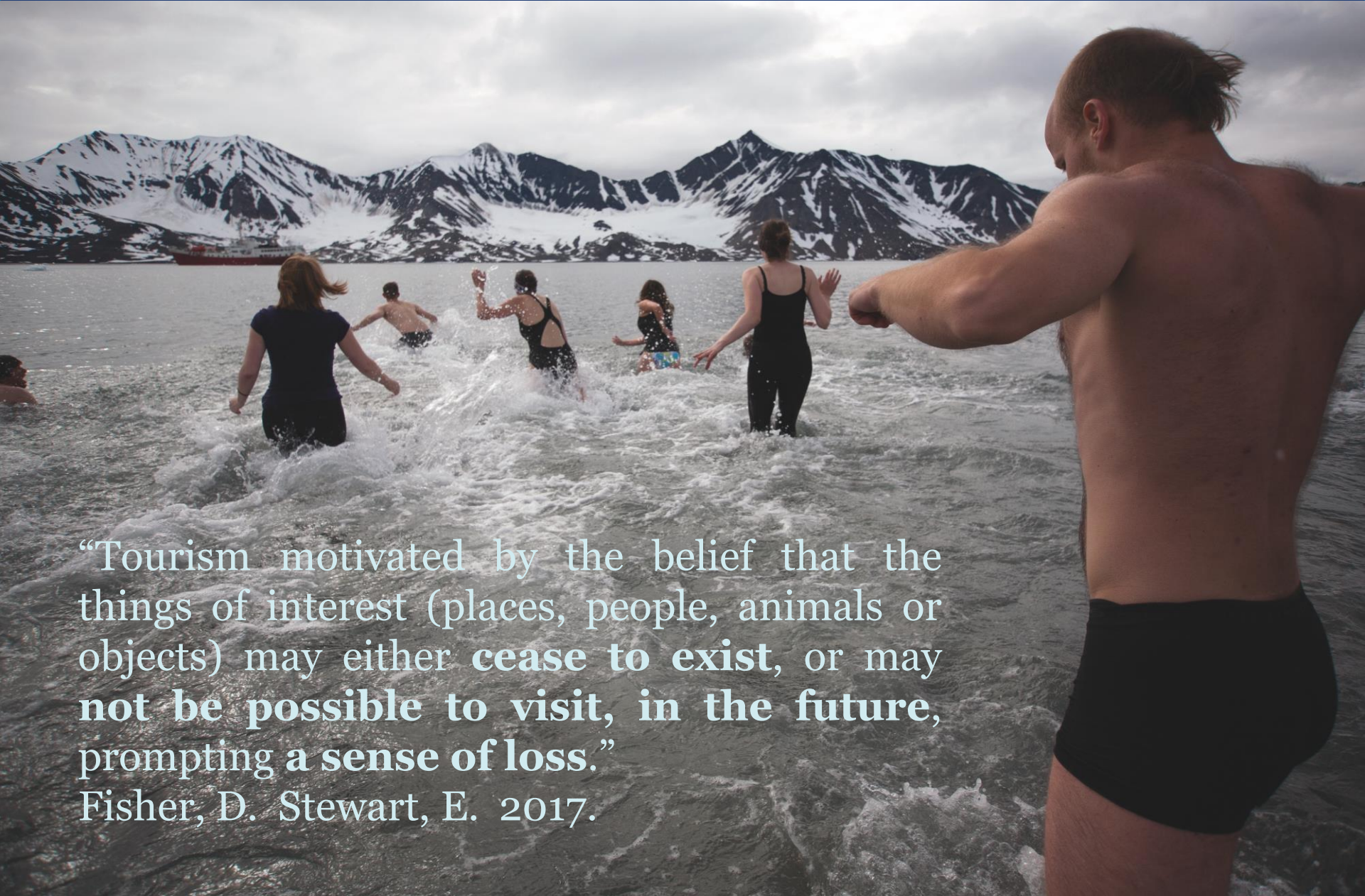




“No one will **protect** what they do not **care** about, and no one will care about what they have never **experienced**”

Sir David Attenborough





“Tourism motivated by the belief that the things of interest (places, people, animals or objects) may either **cease to exist**, or may **not be possible to visit**, in the future, prompting a **sense of loss**.”

Fisher, D. Stewart, E. 2017.



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## Frequently Asked Questions

### About IAATO

- [What is IAATO?](#)
- [What is IAATO's mission?](#)

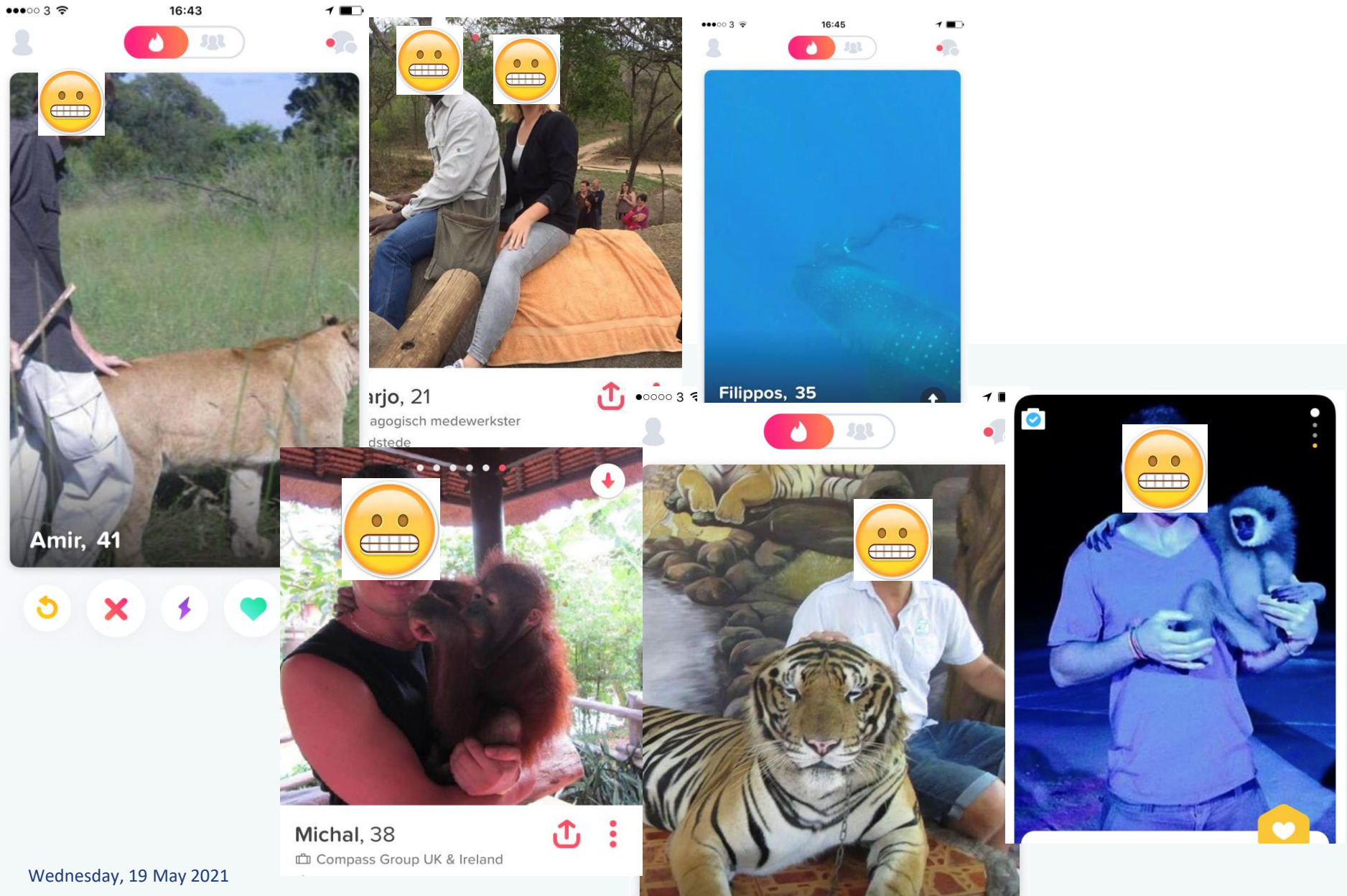
### WHAT IS THE BENEFIT OF ANTARCTIC TOURISM?

Tourism is and should continue to be a driving force in Antarctic conservation. First-hand travel experiences foster education and a better understanding of the destination and the need for responsible tourism. Visitors to Antarctica — representing more than 100 different nationalities on average per season — [return home as ambassadors](#) of goodwill, guardianship and peace.

[Annual Meeting](#)



# Moral Dilemma –Ambassadors Vs Humanitarians of Tinder



## NEWS

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### Magazine

# Should tourists be banned from Antarctica?

By Juliet Rix  
Antarctica


🕒 12 January 2015 | [Magazine](#)



## **The New York Times** If Seeing the World Helps Ruin It, Should We Stay Home?

In the age of global warming, traveling — by plane, boat or car — is a fraught choice. And yet the world beckons.



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## Last chance tourism: Is this trend just causing more damage?

Our love of travel is damaging the world to an almost unreconcilable state. So instead of rushing to see something 'before it's gone', Jessica Brown asks what we should be doing

Jessica Brown | @jessica\_e\_brown | Thursday 7 June 2018 05:00 | 0 comments



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### Science & Environment

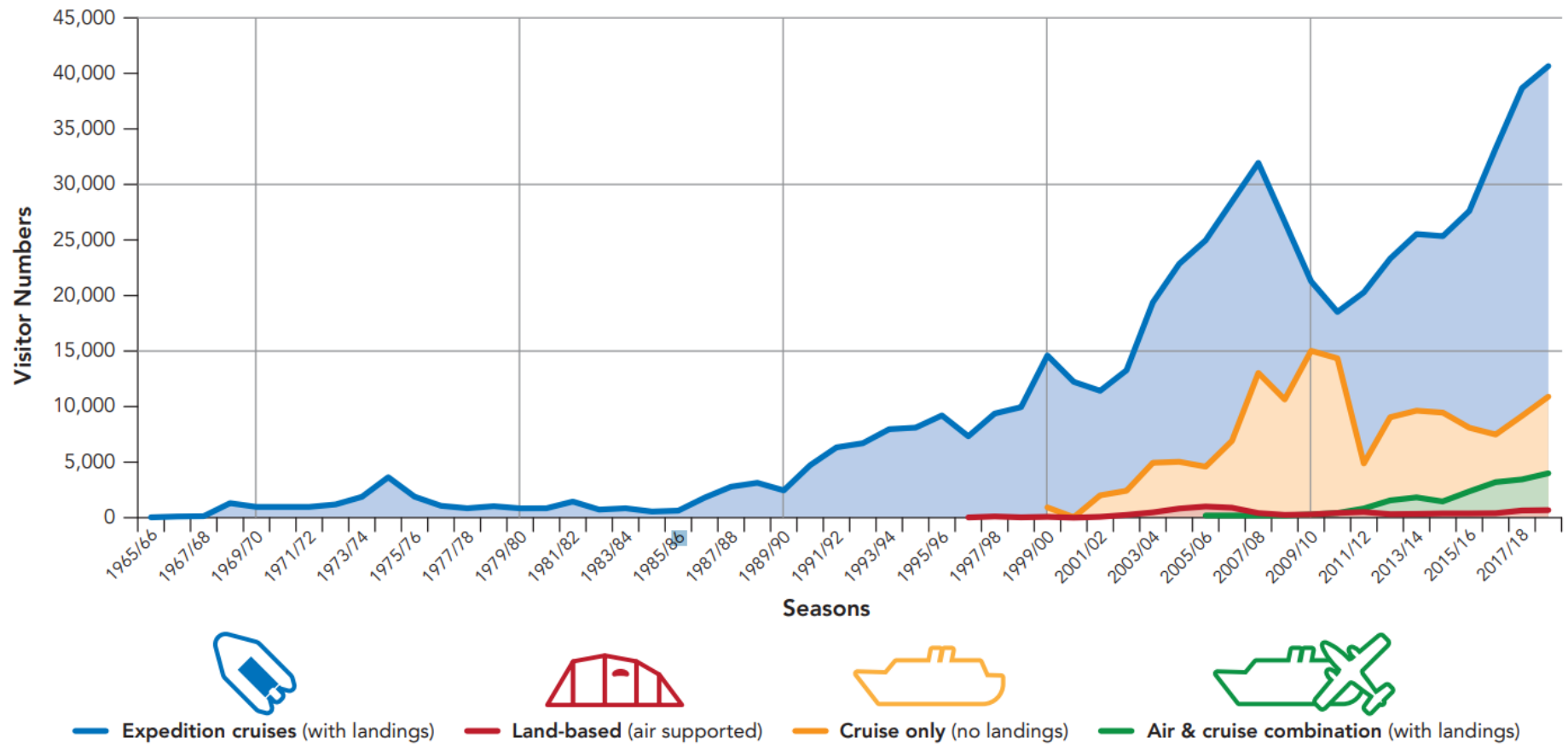
# Tourism's carbon impact three times larger than estimated

By Matt McGrath  
Environment correspondent

🕒 7 Mar 2018



# Growing Concern - Growth of Antarctic Tourism





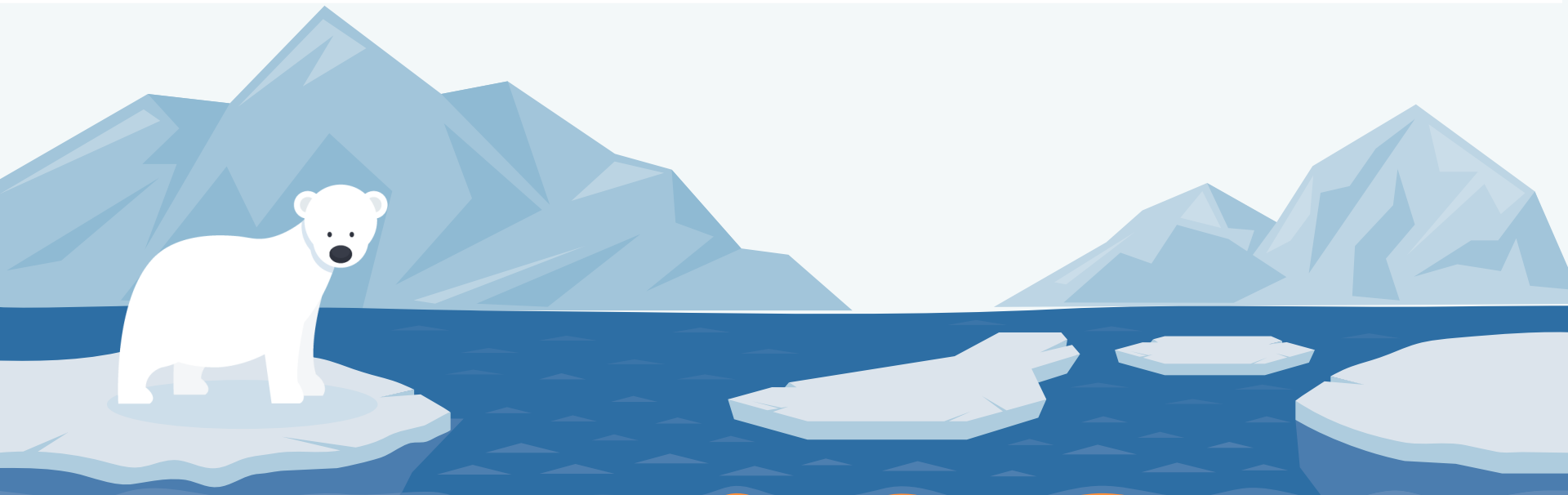
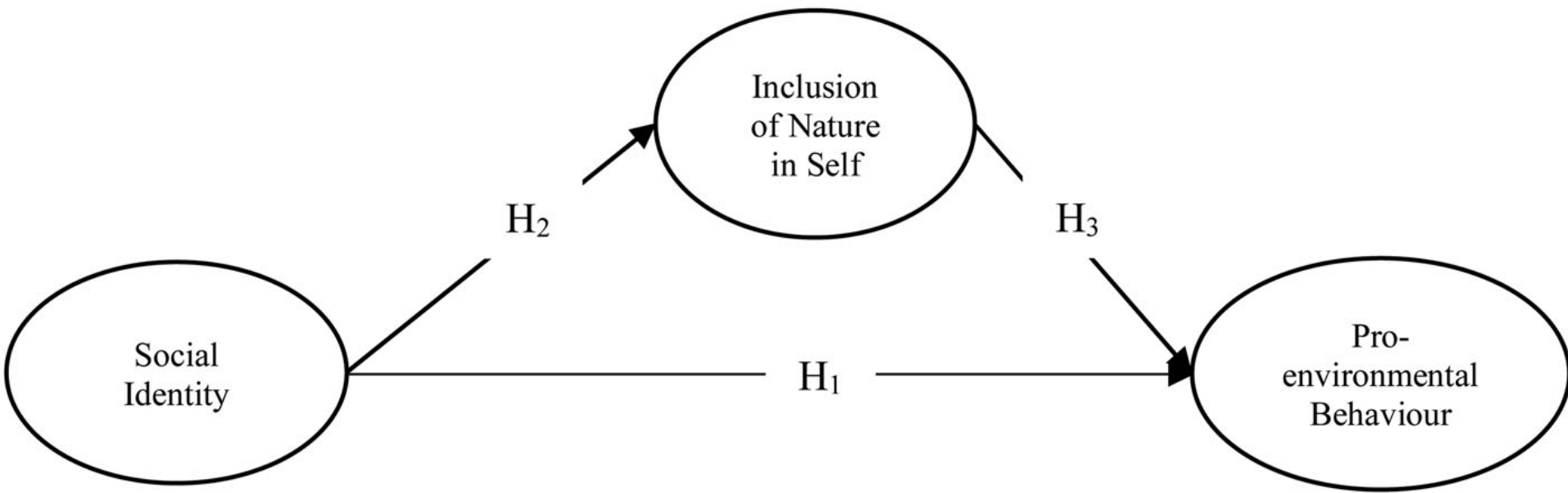
**To evaluate whether or not an alumni programme can empower youth to take action towards global sustainability up to 18 years after their polar voyage**





- Part of an individual's self-concept
  - Sense of unity
  - Empowerment to act on the group's behalf
- (Tajfel & Turner, 1979)







## Design

Online survey (both open and closed questions)

Collaboration with Students on Ice

Youth Polar Alumni 65% aged 14-17 (at time of expedition)

## Sample

Sample 217 (15% response rate)

140 from Arctic / 88 from Antarctic Expeditions

69% female / now 72% aged 21-40

## Measures

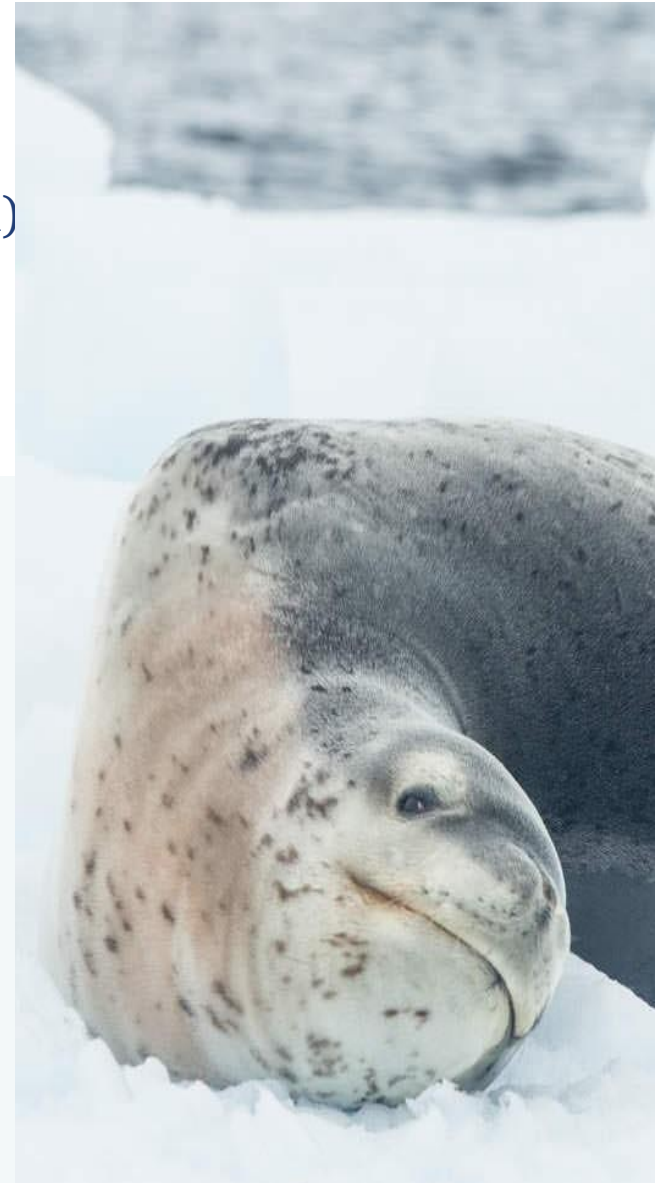
DV = Proenvironmental behaviour towards global sustainability

IV = Social Identity Scale (Ellemers et al. 1999)

M = Inclusion of Nature in Self (INS) (Schultz, 2002)

## Analysis

Mediation (PROCESS Model 4)



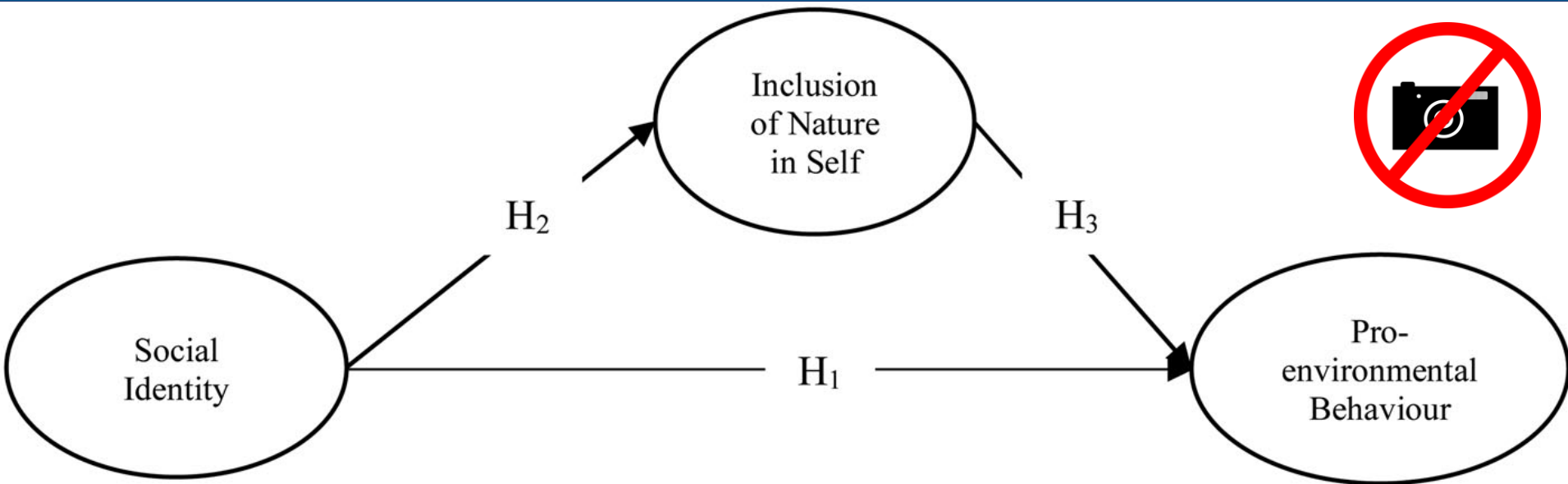


Table 5. Standardized Regression Weights for structural model.

Standardized hypothesized relationship	Std. Estimates	t-value	Result
H1: Social Identity → Inclusion of Nature in Self	.47	3.24***	Supported
H2: Social Identity → Pro-environmental Behaviour	.61	6.35***	Supported
H3: Inclusion of Nature in Self → Pro-environmental Behaviour	.20	2.44*	Supported
Indirect effect	Effect	SE <sub>(boot)</sub>	Boot <sub>95% CI</sub>
H4: Social Identity → Inclusion of Nature in Self → Pro- Environmental Behaviour	.157	.050	.057, .254

Note: ns = not significant.

\* $p < 0.05$ ; \*\*\* $p < 0.001$ .

Variance Explained:

$R^2$  Inclusion of nature in self = 0.22.

$R^2$  Pro-Environmental Behaviour = 0.53.



## Results (QUAL)

Change in feelings/emotions?

Antarctica Participant / Age 18 at time of expedition

*‘Definitely many! I was so incredibly motivated to be a scientist after this expedition, and this excitement still hasn't worn off almost 10 years later’.*



## WAYS WE SUPPORT ALUMNI

...the first step in a lifelong journey of growth and empowerment. The SOI Alumni Program welcomes them with support to transition to the SOI Alumni Program in 2000. Today, we offer more than nine avenues to build their professional capacity.

### PORT

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### ALUMNI COUNCIL

Our Alumni Council focuses on connections to kindle engagement and collaboration, share opportunities and provide support and mentorship.

### ALUMNI CHAPTERS

Alumni Chapters help alumni in specific cities and regions stay in touch with their local networks. Chapters meet, share news and information, attend events and more.

### MENTORSHIP

The mentorship program connects mentors with mentees for guidance on personal, professional or project development.

### TRAVEL GRANTS

Travel grants support alumni to attend conferences, events and training for professional development.

"I was able to get hands-on interaction with research that's going on in my Arctic home on issues like food insecurity, infrastructure development and environmental change due to global warming."  
Juliepa Anrango Kotenik, 2018 Arctic alum

### MICROGRANTS

Microgrants provide seed funding for alumni-led initiatives worldwide so youth can take the inspiration and knowledge they gain on expeditions and give back locally and globally. To date, we have provided alumni 36 microgrants worth a total of \$150,000.

### DELEGATIONS

SOI supports youth-led Alumni Delegations at national and international conferences including the annual Arctic Circle Assembly in Iceland, the International Marine Protected Areas Congress (IMPAC4) in Chile, the IUCN World Conservation Congress in Hawaii, the World Parks Congress in Australia, Arctic Futures 2050 in the United States and more. These opportunities provide professional skill development and industry knowledge.

"I instantly felt like I belonged...I was able to share a part of Inuit culture with a fellow Inuk. It empowered me and assured me of my Inuit identity."  
Heidi Lucas, 2019 Arctic alum

In our most recent alumni survey

**82.4%**

of alumni said their SOI experience influenced their career choice.

**90.5%**

of alumni said it changed their attitude toward other cultures.

**90.5%**

of alumni said it affected their decision to act on causes they are passionate about.

"Victor C. Stewart, E. Maher, P. Gibson, M.A. (under review) Pathways to rural world impact: A transdisciplinary approach to explore the impact of youth experiences in the polar regions on pro-environmental behaviour."

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<https://studentsonice.com/>  
<https://issuu.com/studentsonice/docs/20yearsofsoi>



## Thank you. Questions?

Please connect with me...

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Insta: christyhehir

Email: [christy.hehir@surrey.ac.uk](mailto:christy.hehir@surrey.ac.uk)

## Recent Publications

Hehir, C., Stewart, E.J., Maher, P.T. and Ribeiro, M.A., 2020. Evaluating the impact of a youth polar expedition alumni programme on post-trip pro-environmental behaviour: a community-engaged research approach. *Journal of Sustainable Tourism*, pp.1-20.

**FREE OPEN ACCESS:**

<https://doi.org/10.1080/09669582.2020.1863973>

Denley, T.J., Woosnam, K.M., Ribeiro, M.A., Boley, B.B., Hehir, C. and Abrams, J., 2020. Individuals' intentions to engage in last chance tourism: applying the value-belief-norm model. *Journal of Sustainable Tourism*, pp.1-22. <https://doi.org/10.1080/09669582.2020.1762623>

McCarthy, A; Bartlett, J; Hehir, C. 2020 Hunting aliens in Antarctica. On the hunt for non-native species in Antarctica with the polar alien hunters. *Eco (Environmental Coastal & Offshore)*. 36-38. **FREE:**  
[http://digital.ecomagazine.com/publication/frame.php?i=674747&p=&pn=&ver=html5&view=articleBrowser&article\\_id=3771635](http://digital.ecomagazine.com/publication/frame.php?i=674747&p=&pn=&ver=html5&view=articleBrowser&article_id=3771635)



Illustration by Alice Pullen (2020)